

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,
Complainant,
v.
PUGET SOUND PILOTS,
Respondent.**

Docket TP-

**TESTIMONY OF
CHARLES P. COSTANZO
ON BEHALF OF PUGET SOUND PILOTS**

JUNE 29, 2022

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1 **I. IDENTIFICATION OF WITNESS**

2 **Q: Please state your name, occupation and business address.**

3 A: My name is Charles P. Costanzo. I am the Executive Director of the Puget Sound
4 Pilots Association. Our business address is 2003 Western Ave., Suite 200, Seattle, WA
5 98121.
6

7
8 **Q: Please describe your educational background.**

9 A: I received a BA in history from Colby College in 1998 and earned a law degree in
10 2006 from the University of Connecticut School of Law. A copy of my CV is attached as
11 Exh. CPC-02.
12

13
14 **Q: Please describe your work history that relates to the maritime industry in the
15 United States.**

16 A: Before becoming the PSP Executive Director in October 2021, I served for 11 years
17 as General Counsel and Vice President of the Pacific Region for the American Waterways
18 Operators (“AWO”), a 250-member national trade association for the U.S. tugboat and barge
19 industry.
20

21 AWO’s Pacific Region includes the states of Washington, Alaska, Oregon, California
22 and Hawaii. In my work for AWO, I provided staff leadership to AWO board members and
23 member representatives on issues of concern to the industry, regulatory compliance and
24 safety management system implementation. A significant component of my work involved
25 serving on regional committees focused on maritime safety. During the period of 2013-2017,
26 I was appointed by Washington Governor Jay Inslee to serve as a shipping representative to

1 the Washington Coastal Marine Advisory Committee. Throughout my tenure at AWO, I co-
2 chaired the Pacific Regional Quality Steering Committee, a Coast Guard/towing industry
3 safety partnership charged with improving safety and environmental protection. This
4 committee established and led navigation safety initiatives along the West Coast, including in
5 Puget Sound, Bristol Bay and the Alaskan Arctic to mitigate vessel casualty risks. The
6 Pacific RQSC is the only formally recognized industry-Coast Guard safety partnership and
7 includes representation of the Pacific States/BC Oil Spill Task Force. I have also been
8 involved in developing new rules for vessels of opportunity, oil spill contingency plans, and a
9 Puget Sound vessel traffic risk assessment as part of the Washington Oil Spill Rulemaking
10 Advisory Committee pursuant to the passage of Washington SB 6269. I also helped to
11 develop aspects of the Washington's derelict and abandoned vessels program and served as a
12 towing industry liaison to state initiatives addressing conservation issues involving Southern
13 Resident Killer Whales.
14

16 **II. PURPOSE OF TESTIMONY.**

17 **Q: What is the purpose of your testimony?**

18 **A:** My testimony addresses five topics.

19 First, I will describe PSP's strong commitment to diversity, equity and inclusion ("DEI") as
20 demonstrated by adoption of a formal DEI policy and our comprehensive efforts to diversify our
21 pilot corps.
22

23 Second, I will address the results of the stakeholder engagement process regarding the PSP
24 unfunded pension ordered by the UTC, which was partially successful in that it achieved
25 consensus on a path forward with two of three stakeholders.
26

1 Third, I summarize the statutory and regulatory history of Washington's national
2 leadership role in the effort to develop a comprehensive maritime safety infrastructure
3 framework designed to provide the maximum possible protection against oil spills.
4 Washington has been the most aggressive state regulator in the U.S. in areas of oil spill
5 prevention and response. The State has been an active member of the BC/States Oil Spill
6 Task Force that was established in 1989 following two major oil spills on the West Coast.
7 The first involved the barge Nestucca, which spilled over 300,000 gallons of oil off the
8 coasts of Washington and British Columbia in December 1988. The second was the
9 catastrophic Exxon Valdez oil spill in Alaska's Prince William Sound in March 1989. In
10 2004, the Washington Legislature adopted a "zero spills" policy and revamped its statutory
11 requirements for oil spill prevention to require maintenance of a system that provided the
12 "best achievable protection" against oil spills. Compulsory pilotage is integral to
13 Washington's best-in-class oil spill prevention mission and overall maritime transportation
14 safety infrastructure. These statutes and regulations, which incorporate core principles of
15 Washington's common law public trust doctrine requiring regulators to protect the public's
16 right to navigation, water quality, fish and wildlife habitat, recreational interests and
17 environmental quality, clearly require that the pilotage system serving Puget Sound be
18 staffed and funded at a level designed to be the "best achievable protection" against oil spills.

21 Fourth, there is substantial reason to be skeptical of the seriousness of the
22 commitment to accident-free operations by foreign flag shipowners, who account for over
23 80% of the vessel traffic calling at Puget Sound ports and terminals. Many of these ships fly
24 "flags of convenience," meaning they are registered in states with significantly less stringent
25 environmental and worker safety laws. Most significantly, these shipowners uniformly seek
26

1 to limit their oil spill liability to the minimum bond required by the Oil Pollution Act of
2 1990, which was enacted by Congress in the wake of the Exxon Valdez oil spill, by owning
3 each vessel in their fleet through a shell corporation that holds no other assets. Recent
4 academic literature based on a robust dataset confirms what has long been understood in the
5 maritime community: A very significant percentage of shipping companies deploy these
6 strategies deliberately to externalize the environmental costs and shift the risks created by
7 their highly profitable operations onto the public.

8 When a foreign flag ship enters Puget Sound, a state-licensed Puget Sound pilot is the
9 first person with local maritime expertise to board the vessel and he or she serves as the
10 primary protection against a maritime casualty in that vessel's transits through constricted
11 waterways to and from her port of call. Unlike the ship's master and bridge team, the state-
12 licensed pilot is not influenced by economic considerations. Rather, the pilot's sole mission
13 is navigating safely to protect human life and the environment.

14
15 Fifth, after learning that pilotage rates for a very small class of vessel required to take
16 on a pilot – foreign yachts which in 2021 accounted for less than 50 pilotage assignments –
17 experienced a near doubling of their pilotage rates as a result of Order 09, PSP studied the
18 issue and engaged in discussions with representatives of Pacific Yacht Management and the
19 Northwest Marine Trade Association. The result is an agreement with those parties to
20 address their pilotage rate disparity in this rate proceeding.

21
22
23 **A. PSP's Diversity, Equity and Inclusion Program.**

24 **Q: Please describe what PSP has done to diversify its pilot corps to increase the number**
25 **of female and minority pilots.**

1 A: Historically, PSP has been a very active participant in the DEI program of the
2 Washington Board of Pilotage Commissioners. This has involved a wide array of outreach
3 efforts at maritime industry conferences and job fairs, maritime academies, Washington's
4 maritime high school and other venues as well as the funding of scholarships for members of
5 under-represented communities to pursue maritime careers. However, the results of those efforts
6 to date have been very modest. Of PSP's current complement of 52 pilots, one is female, a
7 second is a person of color and the rest are white males.

8 Because pilot corps diversification is an extremely important issue to PSP, as emphasized
9 in the testimony of PSP President Captain Ivan Carlson, we have redoubled our DEI efforts in
10 the last year. Early in 2022, PSP adopted a formal policy to address DEI issues in pilotage and
11 the maritime industry. A copy is Exhibit CPC-03. We recognized our unique position in the
12 maritime industry as pilots and identified an opportunity to create pathways into the maritime
13 industry generally, and pilotage specifically, for a more diverse population – one that better
14 reflects the general population. PSP realized that we needed to dedicate resources to help our
15 efforts to build awareness and create pathways for young people, women, persons of color, and
16 other under-represented populations in the maritime industry to get involved and benefit from
17 this important work. This work is also consistent with state policy goals embodied by recently
18 enacted apprenticeship legislation at RCW 49.04: “To achieve the goals of rebuilding a robust
19 postpandemic workforce and undertaking active efforts to provide equity, diversity, inclusion,
20 and accessibility..” We feel it also aligns with recently introduced bipartisan federal legislation,
21 S. 4357, the MARAD Authorization bill, “to improve the representation of women and
22 underrepresented communities in the next generation of the mariner workforce.”
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1 We also recognize that the standard work schedule in maritime industry – alternating
2 multi-day periods of on watch/off watch work – is an impediment to attracting women
3 candidates because it negatively impacts their ability to have a family. As described in the
4 testimony of Captain Sandy Bendixen and Chief Mate Alysia Johnson, pilotage can be attractive
5 to qualified female mariners provided the pilot group to which they are applying also has family-
6 friendly policies in addition to the opportunity that pilots have to largely work from home as
7 opposed to serving extended work periods aboard a blue-water oceangoing vessel or a brown-
8 water tugboat. To that end, PSP has recently adopted a new operating rule providing up to six
9 months of maternity-related medical leave at full pay for PSP's female pilots. We are hopeful
10 that this policy, along with approval of the nationally competitive package of compensation and
11 benefits requested by PSP in this rate case, will substantially increase our success in attracting
12 highly qualified women to PSP. A copy of PSP's new Operating Rule 20 is Exhibit CPC-04.
13
14

15 **Q: Why does PSP believe that adoption of a maternity leave policy will increase the**
16 **success of its efforts to recruit female pilots?**

17 A: In my view, there is no question that this new PSP policy, which is the first of its kind for
18 a pilot group in the United States, will result in more women becoming pilot trainees for the
19 Puget Sound Pilotage District over the next five years. One only has to read the relevant portions
20 of the testimony of Captains Deb Dempsey and Sandy Bendixen and Chief Mate Alysia Johnson
21 to reach this conclusion. And most significantly, as Chief Mate Johnson makes clear, the
22 adoption of this policy by PSP and hopefully other pilot groups throughout the U.S. has strong
23 potential to cause women pursuing deck officer careers to pursue those careers for the 10 to 15
24
25
26

1 years necessary to become qualified for the maritime pilotage profession, knowing that this
2 profession embraces the opportunity for its pilots to have families.

3
4 **Q: Has PSP added a new expense category to its 2023 budget that is included in the**
5 **2023 PSP pro forma statement of operations, which is Exhibit MB-05 to the testimony of**
6 **PSP Office Manager Magan Brooks.**

7 A: Yes. That expense category for \$50,000 is designed to cover the annual costs of
8 sustaining PSP's highly robust diversity, equity and inclusion program. The cost covers outreach
9 efforts and scholarships.

10
11
12 **B. Results of UTC-Ordered Stakeholder Process to Address Transition of PSP**
13 **Pension Plan from Unfunded to Funded.**

14 **Q: Please describe how PSP approached the UTC directive in Order 09 to engage with**
15 **stakeholders on the issue of transitioning PSP's unfunded pension plan to a fully funded**
16 **defined benefit plan.**

17 A: PSP understood the UTC mandate on this issue and took it very seriously. PSP has long
18 recognized that it has both a moral and legal obligation to honor the pension benefit promise that
19 our pilot group makes to every PSP pilot upon licensure, namely that the pension each has
20 earned after making a mid-career move to the pilotage profession will in fact be paid for the
21 balance of their lifetime. Knowing the gravity of this responsibility, PSP pursued a two-step
22 approach to the stakeholder engagement process related to its pension plan. First, recognizing
23 that PSP had to treat its legally enforceable pension obligations to both existing retirees and
24 currently working pilots as an incontestable bedrock principle, the first step was to engage both a
25 pension law expert and an actuary to address two fundamental questions:
26

- 1 • Was it possible to transition the existing PSP pension plan to a fully funded ERISA-qualified pension plan that preserved the benefit level promised in the existing PSP pension plan?
- 2
- 3 • Would the transition to a fully funded pension save costs?

4 As described in the testimony of pension attorney Bruce McNeil and actuary Christopher Wood,
5 the answers to both questions were affirmative. Although somewhat complicated, the transition
6 to a fully funded Multiple Employer Plan sponsored by PSP is achievable and the costs of the
7 plan drop substantially over time compared to maintaining the current pay-as-you-go or farebox
8 pension plan. Once PSP had the answers to these very important questions, which took a number
9 of months in 2021, our pilot group was in a position to take the second step, namely to initiate
10 the pension-related stakeholder process with the benefit of highly relevant information to make
11 that process meaningful and productive.
12

13
14 **Q: Please describe the stakeholder process that PSP initiated.**

15 A: We understood from the beginning that PSP needed comprehensive information about
16 how a transition might be accomplished and the long-term costs of the various alternatives. A
17 stakeholder process could not be productive without first providing stakeholders with detailed
18 information regarding whether a transition was possible, how it could be accomplished and how
19 the costs compare to continuing to fund PSP pension benefits on an unfunded basis through the
20 tariff. Once all of that preparatory work was completed and PSP was in a position to provide that
21 information to all stakeholders, we initiated a process that began in late January 2022 and
22 continued through mid-June. All stakeholders were first provided with copies of the pension
23 plan, census data for retirees and working pilots and 50-year cost projections for three different
24 scenarios prepared by an actuary with experience in the mid-1990s serving as the lead actuary
25
26

1 when the Oregon Board of Maritime Pilots transitioned Oregon pilot groups from their farebox
2 pensions to defined contribution pension plans. There were then four stakeholder meetings in
3 March, April and May and then telephone calls and correspondence that culminated in an
4 agreement between PSP and two stakeholders (Pacific Yacht Management and Northwest
5 Marine Trade Association) and apparent impasse with PMSA.

6
7 **Q: With respect to Pacific Yacht Management and Northwest Marine Trade**
8 **Association, what is the nature of the agreement with PSP on pension funding?**

9 A: I am pleased to report that PSP and both Pacific Yacht Management and Northwest
10 Marine Trade Association are in agreement on three key points. First, PSP's time-honored legal
11 obligations to its retirees and all working pilots are legally enforceable obligations that should be
12 funded through the tariff. Second, in order to maintain a competitive package of compensation
13 and benefits that is attractive to top-flight mariner applicants, the existing PSP pension plan
14 benefit accrual rate of 1.5% per year should remain in place for all future licensees. Third, the
15 UTC should approve a transition to a fully funded defined-benefit plan that replicates the
16 existing PSP plan benefits using one of the two fully funded scenarios described in the testimony
17 of Mr. McNeil and Mr. Wood and summarized in the cost projections on Exhibit CPC-09. It is
18 my understanding that both Pacific Yacht Management and Northwest Marine Trade Association
19 plan to submit letters or testimony in this rate case that formally confirms their support for full
20 tariff funding of a transition of the existing PSP pension plan to a fully funded defined benefit
21 plan.
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1 **Q: Please describe the nature of the impasse between PSP and PMSA on the pension**
2 **issues covered in the stakeholder process that you have described.**

3 A: Quite frankly, we made no progress whatsoever with PMSA. Based on my observations, I
4 attribute this to PMSA's unwillingness at any time to acknowledge that the tariff funding the
5 pilotage system in Puget Sound should cover the costs of the promised pension benefits to
6 current retirees and to all currently working PSP pilots when they retire. Instead, PMSA focused
7 on an unfair process-related argument, repeatedly complaining that PSP started the stakeholder
8 sessions with its own "hand-picked actuary" rather than jointly engaging that actuary with other
9 parties. As explained above, PSP had a fiduciary obligation to educate itself first regarding the
10 various options and their costs before launching the stakeholder process. All of the materials
11 provided to stakeholders and all pertinent correspondence in letter or email form is contained in
12 Exhibits CPC-05 through CPC-15. Suffice it to say here that, despite multiple stakeholder
13 sessions over three months, PMSA did not engage its own actuary until sometime in May and as
14 late as June 6, 2022 had never yet taken any type of position on any issue, as confirmed in an
15 email from Mike Moore that included the following statement: "We obviously don't have any
16 positions (final or preliminary) on any issues with specificity yet." In response to that email, our
17 counsel forwarded a letter dated June 8, 2022 to Mr. Moore declaring an impasse between PSP
18 and PMSA while at the same time leaving the door open to further discussions and committing to
19 continue providing information at PMSA's request. PMSA responded to PSP's June 8, 2022
20 letter in a June 9, 2022 letter, included as Exhibit CPC-15, inviting PSP to recommence the
21 stakeholder sessions, but PSP stands by its position that it fully complied with the UTC mandate
22 and will not be scheduling any further meetings. If PMSA wishes to pursue settlement
23 negotiations on the funded pension issue in this rate case, PSP's door is always open.
24
25
26

1 **Q: Do you believe that PSP made a good faith effort to complete the stakeholder**
2 **engagement process ordered by the UTC concerning pension-related issues?**

3
4 A: Absolutely. The proof is in the documentation that PSP has submitted as exhibits and the
5 testimony of multiple witnesses with expertise on this issue. PSP's door remains open to further
6 discussions with PMSA, but PSP has an obligation both to its members and to the State of
7 Washington to move as quickly as reasonably possible to redress the substantially underfunded
8 character of the pilotage system serving Puget Sound today. The sheer magnitude and
9 comprehensive character of PSP's testimony from 23 witnesses and over 2000 pages of exhibits
10 clearly demonstrates the legitimacy of this position on the part of PSP. Contrary to the
11 suggestions of PSP's historic opponent on pilotage rates, PSP had no obligation to engage in an
12 unnecessarily long and unproductive stakeholder process with PMSA.

13
14
15 **C. The Statutory "Best Achievable Protection" Standard Governs UTC**
16 **Pilotage Rate-Setting for the Puget Sound Pilotage District.**

17 **Q: What is the public trust doctrine?**

18 A: The public trust doctrine as it is understood and applied in the United States evolved from
19 the historic principle at English common law that title to submerged lands is held in trust by the
20 sovereign for the benefit of the public. The U.S. Supreme Court (adopting the language of the
21 New York State Court of Appeals), explained the doctrine's origins as follows:

22
23 The title to lands under tide waters, within the realm of England, were, by
24 the common law, deemed to be vested in the king as a public trust, to
25 subserve and protect the public right to use them as common highways for
26 commerce, trade and intercourse. The king, by virtue of his proprietary
interest could grant the soil so that it should become private property, but his
grant was subject to the paramount right of public use of navigable waters,
which he could neither destroy nor abridge. In every such grant there was an

1 implied reservation of the public right, and so far as it assumed to interfere
2 with it, or to confer a right to impede or obstruct navigation, or to make an
3 exclusive appropriation of the use of navigable waters, the grant was void.

4 . . .

5 The principle of the common law to which we have adverted is founded
6 upon the most obvious principles of public policy. The sea and navigable
7 rivers are natural highways, and any obstruction to the common right, or
8 exclusive appropriation of their use, is injurious to commerce, and if
9 permitted at the will of the sovereign, would be very likely to end in
10 materially crippling, if not destroying, it. The laws of most nations have
11 sedulously guarded the public use of navigable waters within their limits
12 against infringement, subjecting it only to such regulation by the state, in the
13 interest of the public, as is deemed consistent with the preservation of the
14 public right.

15 *Illinois Cent. R.R. Co. v. Illinois*, 146 U.S. 387, 458, 13 S. Ct. 110, (1892) (quoting *People v.*
16 *New York & S.I. Ferry Co.*, 68 N.Y. 71, 76 (1877)).

17 In the United States, our system of federalism contemplates the coexisting sovereignty of
18 the federal government and the individual states. As the Supreme Court explained in the seminal
19 case of *Martin v. Waddell's Lessee*, 41 U.S. 367, 410 (1842):

20 [W]hen the [American] revolution took place, the people of each state
21 became themselves sovereign; and in that character hold the absolute right to
22 all their navigable waters, and the soils under them, for their own common
23 use, subject only to the rights since surrendered by the constitution to the
24 general government.

25 *Waddell's Lessee* stands for the proposition that the sovereign imperative to protect the
26 public trust—and, by extension, to define the contours of the public trust doctrine—lies with the
27 states, subject only to the supremacy of federal law established under authority granted by the
28 states upon their ratification of the U.S. Constitution.

29 The Supreme Court articulated the modern American public trust doctrine in *Illinois*
30 *Cent. R.R. Co.*, as follows:

1 That the state holds the title to the lands under the navigable waters of
2 Lake Michigan, within its limits, in the same manner that the state holds title
3 to soils under tide water, by the common law, we have already shown; and
4 that title necessarily carries with it control over the waters above them,
5 whenever the lands are subjected to use. But it is a title different in character
6 from that which the state holds in lands intended for sale. . . . It is a title held
7 in trust for the people of the state, that they may enjoy the navigation of the
8 waters, carry on commerce over them, and have liberty of fishing therein,
9 freed from the obstruction or interference of private parties.

10 *Illinois Cent. R.R. Co.*, 146 U.S. at 452. The Court’s ruling thus both affirmed the existence of
11 the public trust doctrine in American common law and provided a federal law basis for
12 individual states’ application and adaptation of the doctrine within their respective sovereign
13 spheres to meet the unique needs of their citizens.

14 **Q: How does the public trust doctrine vary by state?**

15 A: *Illinois Cent. R.R. Co.*’s statement of the public trust doctrine has been widely interpreted
16 as setting a federal law floor, or minimum requirement “in terms of waters covered, uses
17 protected, and restraints on state authority to eliminate the public trust,” which states may expand
18 upon but not abrogate. Robin Kundis Craig, *A Comparative Guide to the Western States’ Public*
19 *Trust Doctrines: Public Values, Private Rights, and the Evolution Toward an Ecological Public*
20 *Trust*, 37 Ecology L. Quarterly 53, 71 (2010). From that baseline, the public trust doctrine has
21 evolved very differently in different states.

22 In practice, a state’s interpretation and application of the public trust doctrine typically
23 reflects that state’s broader policy preferences. States that embrace a maximalist view of private
24 rights (*e.g.*, Arizona) tend to interpret the doctrine as limited to (or close to) the minimum federal
25 requirements. *Id.* Conversely, states—including West Coast maritime states—with strong
26 traditions of prioritizing environmental protection apply the public trust doctrine more broadly.

1 Perhaps most significantly, several states interpret the public trust doctrine to protect
2 public use rights beyond the traditional core economic activities (fishing, navigation, and
3 commerce), and to embrace citizens' acute interest in protecting the state's natural resources and
4 ecology. Sometimes called the "ecological public trust doctrine," these policies are grounded in
5 what the Supreme Court of Hawaii aptly described as "a superior public interest in [the State's]
6 natural bounty," and have been recognized as part of some states' common law for at least the
7 past four decades. *Robinson v. Ariyoshi*, 65 Haw. 641, 676, 658 P.2d 287 (1982).

8 The Supreme Court of California, for example, has explained that "[t]he objective of the
9 public trust has evolved in tandem with the changing public perception of the values and uses of
10 waterways." *Nat'l Audubon Soc'y v. Superior Ct.*, 33 Cal. 3d 419, 434, 658 P.2d 709, 189 Cal.
11 Rptr. 346 (1983). Accordingly, the modern doctrine must be held to protect "the right to fish,
12 hunt, bathe, swim, to use for boating and general recreation purposes the navigable waters of the
13 state." *Id.* (quotation omitted). Public trust protection of the State's natural resources and ecology
14 flows directly from this appropriately robust understanding of the public interest.
15
16

17 **Q: How does the State of Washington interpret and apply the public trust doctrine?**

18 A: There is no question that Washington law embraces a broad view of the public trust
19 doctrine that is similar to its neighboring coastal states and is consistent with Washington's focus
20 on environmental protection.
21

22 Washington's public trust doctrine is grounded in its Constitution, which states that:

23 The state of Washington asserts its ownership to the beds and shores of all
24 navigable waters in the state up to and including the line of ordinary high
25 tide, in waters where the tide ebbs and flows, and up to and including the
26 line of ordinary high water within the banks of all navigable rivers and lakes:
Provided, That this section shall not be construed so as to debar any person
from asserting his claim to vested rights in the courts of the state.

1 And that:

2 The state shall never give, sell or lease to any private person, corporation, or
3 association any rights whatever in the waters beyond such harbor lines, nor
4 shall any of the area lying between any harbor line and the line of ordinary
5 high water, and within not less than fifty feet nor more than two thousand
6 feet of such harbor line (as the commission shall determine) be sold or
7 granted by the state, nor its rights to control the same relinquished, but such
8 area shall be forever reserved for landings, wharves, streets, and other
9 conveniences of navigation and commerce.

10 Const. art. XV, § 1; *id.* art. XVII, § 1.

11 These constitutional provisions assert Washington’s permanent, inalienable control of the
12 state’s waterways in service of the public interest. Thus, as the Washington Supreme Court
13 explained:

14 The state can no more convey or give away this jus publicum interest
15 than it can abdicate its police powers in the administration of government
16 and the preservation of the peace. Thus it is that the sovereignty and
17 dominion over this state's tidelands and shorelands, as distinguished
18 from *title*, always remains in the State, and the State holds such dominion in
19 trust for the public. It is this principle which is referred to as the “public trust
20 doctrine”. Although not always clearly labeled or articulated as such, our
21 review of Washington law establishes that the doctrine has always existed in
22 the State of Washington.

23 *Caminiti v. Boyle*, 107 Wn. 2d 662, 669–70, 732 P.2d 989 (1987) (quotation and
24 footnotes omitted). The Washington Court of Appeals has explicitly interpreted the
25 public trust doctrine to extend to natural resource management, holding in *Wash. State
26 Geoduck Harvest Ass'n v. Wash. State Dep't of Nat. Res.*, 124 Wn. App. 441, 452, 101
P.3d 891 (2004), that the doctrine applied to the Department of Natural Resources’
regulation of commercial geoduck harvest.

1 **Q: Are public trust doctrine principles including the State’s duty to protect its ecology**
2 **and natural resources for the benefit of its citizens, reflected in Washington’s statutes?**

3 A: Yes. Washington’s first-class suite of environmental and natural resource laws
4 incorporate public trust principles in their findings, policy, and administration. To illustrate this
5 point, I would like to give three examples.

6 First, RCW 79.105.010 *et seq.*, “articulate[s] a management philosophy to guide the
7 exercise of the state’s ownership interest and the exercise of the [Department of Natural
8 Resources’] management authority” of Washington’s aquatic lands. RCW 79.105.020. Section
9 79.105.010 of the Act states explicitly that “state-owned aquatic lands are a finite natural
10 resource of great value and an irreplaceable public heritage.” *Id.* § 79.105.010. The Act therefore
11 requires that in leasing aquatic lands, “priority shall be given to uses which enhance renewable
12 resources, waterborne commerce, and the navigational and biological capacity of the waters, and
13 to statewide interests as distinguished from local interests.” *Id.* § 79.105.210(1). Likewise, the
14 Act permits land exchanges only “if the exchange is in the public interest and will actively
15 contribute to the public benefits established in RCW 79.105.030,” which include pillars of the
16 public trust doctrine such as “[f]ostering water-dependent uses” and “[e]nsuring environmental
17 protection.” *Id.* §§ 79.105.030(2)–(3), 79.105.400.

18
19
20 Second, Washington’s Water Code also incorporates public trust principles. *Id.* §§
21 90.03.005–.675. Section 90.03.005 of the Water Code articulates the Legislature’s policy as
22 follows:

23 It is the policy of the state to promote the use of the public waters in a
24 fashion which provides for obtaining maximum net benefits arising from
25 both diversionary uses of the state’s public waters and the retention of waters
26 within streams and lakes in sufficient quantity and quality to protect
instream and natural values and rights.

1 The Act goes on to affirm that “[s]ubject to existing rights all waters within the state belong to
2 the public. . . .” *Id.* § 90.03.010.

3 The third—and most significant—example that I would like to address is Washington’s
4 nation-leading Oil and Hazardous Substance Spill Prevention and Response Act (“OSPRE”) that
5 is codified at RCW 90.56.005–.905. The Act’s findings are contained at RCW 90.56.005.

6 Several of the Act’s key findings are quoted in full below, with my emphasis added:

- 7 1. The legislature declares that waterborne transportation as a source of supply for
8 oil and hazardous substances poses special concern for the state of Washington.
9 Each year billions of gallons of crude oil and refined petroleum products are
10 transported as cargo and fuel by vessels on the navigable waters of the state. The
11 movement of crude oil through rail corridors and over Washington waters creates
12 safety and environmental risks. The sources and transport of crude oil bring risks
13 to our communities along rail lines and to the Columbia River, Grays Harbor, and
14 Puget Sound waters. These shipments are expected to increase in the coming
15 years. Vessels and trains transporting oil into Washington travel on some of the
16 most unique and special marine environments in the United States. These marine
17 environments are a source of natural beauty, recreation, and economic livelihood
18 for many residents of this state. As a result, the state has an obligation to ensure
19 the citizens of the state that the waters of the state will be protected from oil spills.
- 20 2. The legislature finds that prevention is the best method to protect the unique and
21 special marine environments in this state. The technology for containing and
22 cleaning up a spill of oil or hazardous substances is at best only partially effective.
23 Preventing spills is more protective of the environment and more cost-effective
24 when all the response and damage costs associated with responding to a spill are
25 considered. Therefore, the legislature finds that the primary objective of the state
26 is to achieve a zero spills strategy to prevent any oil or hazardous substances from
entering waters of the state.
3. Recent accidents in Washington, Alaska, southern California, Texas,
Pennsylvania, and other parts of the nation have shown that the transportation,
transfer, and storage of oil have caused significant damage to the marine
environment.
4. Washington's navigable waters are treasured environmental and economic
resources that the state cannot afford to place at undue risk from an oil spill.
5. The state has a fundamental responsibility, as the trustee of the state’s natural
resources and the protector of public health and the environment to prevent the
spill of oil.

1 RCW 90.56.005.

2 The three statutes discussed above each demonstrate that Washington’s environmental laws
3 are grounded in public trust principles including the public’s right to the protection and use of the
4 State’s natural resources. Perhaps most significantly, the Legislature’s express statement in
5 OSPRA that it is the “trustee” of Washington’s natural resources establishes a clear policy that
6 regulations that materially implicate the state’s natural resources must be interpreted consistent
7 with public trust principles.
8

9 Importantly, the Legislature concluded in enacting OSPRA that as to the prevention of oil
10 spills, the state’s fiduciary responsibility as trustee requires nothing less than the “best achievable
11 protection” of the state’s natural resources and environment. RCW 90.56.005(i). This standard is
12 likewise incorporated in OSPRA’s sister statute, the Vessel Oil Spill Prevention and Response
13 Act (“VOSPRA”). *Id.* §§ 88.46.010–.927; *see, e.g., id.* § 88.46.040(3) (providing that DOE will
14 only approve a prevention plan if the plan “provides the best achievable protection from damages
15 caused by the discharge of oil into the waters of the state”).
16
17

18 **Q: Could you please describe the policies adopted by the Legislature in connection with**
19 **the OSPRA findings that you discuss above?**

20 A: The Legislature adopted key policy requirements under OSPRA that are highly relevant
21 to understanding and interpreting Washington’s pilotage laws. Again, it is helpful to quote some
22 of the Act’s key policies in full, including the following:
23

- 24 1. To establish state agency expertise in marine safety and to centralize state
25 activities in spill prevention and response activities.
- 26 2. To prevent spills of oil and to promote programs that reduce the risk of both
catastrophic and small chronic spills.

1 3. To maintain the best achievable protection that can be obtained through the use of
2 the best achievable technology and those staffing levels, training procedures, and
3 operational methods that provide the greatest degree of protection achievable.

4 *Id.* § 90.56.005(4)(a)–(b), (i).

5 The Legislature’s establishment of best achievable protection or “BAP” as the benchmark
6 of the state’s fiduciary duty is especially important because it prescribes both the standard of
7 protection that is required for the prevention of oil spills, and the means of achieving that
8 protection, including through staffing levels, training procedures, and operational methods that
9 provide “the greatest degree of protection achievable.” In its regulations, the Department of
10 Ecology defines “best achievable protection” as follows:

11 [T]he highest level of protection that can be achieved through the use of the
12 best achievable technology and those staffing levels, training procedures, and
13 operational methods that provide the greatest degree of protection available.
14 The director's determination of best achievable protection must be guided by
15 the critical need to protect the state's natural resources and waters, while
16 considering: The additional protection provided by the measures, the
17 technological achievability of the measures, and the cost of the measures.

18 WAC 173-180-025(1).

19 The Vessel Oil Spill Prevention and Response Act contains a materially identical definition.

20 RCW 88.46.010.

21 **Q: Which state agency is primarily responsible for implementing and administering the**
22 **OSPRA, and has it published any associated regulations or commentary?**

23 A: OSPRA mandates a wide range of safety requirements and protocols, including the
24 establishment of prevention plans, contingency plans, and operation standards. The Act also
25 contains financial responsibility requirements and establishes criminal and civil penalties for
26

1 misconduct. These requirements are implemented and administered by the Department of
2 Ecology, which has adopted a robust set of regulations to that purpose.

3 In its informal publications, the Department describes the catastrophic consequences of a
4 significant oil spill on Puget Sound and the critical importance of the state's zero spill policy. Per
5 the Department, "[a] significant oil spill could cost the state an average of \$10.8 billion (based on
6 2006 estimates) and adversely affect 165,000 jobs." *Oil Spill Prevention in Washington*, Dept. of
7 Ecology, <https://ecology.wa.gov/Spills-Cleanup/Spills/Oil-spill-prevention>. Such an event would
8 "disrupt maritime shipping, port activities, recreation, and tourism, and cause significant harm to
9 fish, shellfish, and wildlife resources." *Id.* The Department succinctly describes the challenges
10 that Washington faces and the magnitude of the state's responsibility as the trustee of its citizens:
11

12 More than 20 billion gallons of oil is transported through Washington state
13 each year by vessel, pipeline, and rail. Washington is home to ports that handle
14 significant international and domestic shipping trade, and Washington is a
15 major oil refining state. Oil is constantly moving in, around, and out of
16 Washington. Washington invests heavily in spill prevention and preparedness
17 because the consequences of an oil spill are extremely high. Oil spills can halt
18 commerce and cause severe economic consequences.

17 Washington has a lot at stake. It's got some of the world's most special and
18 unique marine environments, which are sources for beauty, recreation, food
19 supply, and economic livelihood. Washington has rich stocks of salmon and
20 shellfish.

20 Washington also has one of the lowest oil spill rates in the nation because we
21 have such a strong safety prevention net — one of the most comprehensive
22 spill prevention, preparedness, and response programs in the nation and world.

22 *Id.*

23 **Q: Does the Department of Ecology track the causes of oil spills?**

24 A: Yes. The Department tracks and publishes the causes of spills. Incredibly, all three of the
25 leading immediate causes of spills cited (in order of total number of incidents:
26

1 inattention/distraction, procedural error, and judgment), involved human error. *Why Spills*
2 *Happen*, Dept. of Ecology, [https://ecology.wa.gov/Spills-Cleanup/Spills/Oil-spill-](https://ecology.wa.gov/Spills-Cleanup/Spills/Oil-spill-prevention/Why-spills-happen)
3 [prevention/Why-spills-happen](https://ecology.wa.gov/Spills-Cleanup/Spills/Oil-spill-prevention/Why-spills-happen). This demonstrates that while BAP requires implementing the
4 “best achievable technology,” it is the requirement to ensure optimal “staffing levels, training
5 procedures, and operational methods” that does the heavy lifting to provide Washington the
6 greatest degree of protection achievable against the risk of oil spills. WAC 173-180-025(1).
7

8 **Q: Does the State of Washington regulate the staffing levels and training procedures of**
9 **tank vessels and their crews?**

10 A: The State of Washington has demonstrated a clear understanding that the skill and
11 judgment of mariners engaged in transporting oil is critical to spill prevention. However, while
12 the state does require prevention plans and other reporting related to ships’ staffing and training,
13 its authority to regulate tank vessels and their crews is significantly limited by federal
14 preemption. Two U.S. Supreme Court cases illustrate this point.
15

16 The first case, *Ray v. Atl. Richfield Co.*, 435 U.S. 151, 98 S. Ct. 988 (1978), involved a
17 challenge to the 1975 Washington Tanker Act. Among other protective measures, the Tanker Act
18 required both enrolled (*i.e.* engaged in domestic or coastwise trade) and registered (*i.e.* engaged
19 in foreign trade) tank vessels of at least 50,000 deadweight tons to carry a Washington-licensed
20 maritime pilot while navigating Puget Sound. *Ray*, 435 U.S. at 158. The Court upheld
21 Washington’s compulsory pilotage with respect to foreign ships but struck down the requirement
22 as to enrolled ships, holding that the state law was preempted by the Ports and Waterways Safety
23 Act of 1972, which barred states from requiring the pilot of a coastwise vessel to hold a state
24 license in addition to a federal pilot license issued by the U.S. Coast Guard. Notably, the
25
26

1 Supreme Court also struck down Washington’s ban on “supertankers” entering Puget Sound, *id.*
2 at 178, but the ban was reintroduced and ultimately passed into federal law thanks to the work of
3 Washington’s iconic Senator Warren Magnuson.

4 The second key case, *United States v. Locke*, 529 U.S. 89, 120 S. Ct. 1135 (2000),
5 involved an industry challenge to Washington’s legislative response to the catastrophic 1989
6 *Exxon Valdez* spill. In the wake of that disaster, Washington established the Office of Marine
7 Safety (which was later abolished, and its responsibilities assumed by the Department of
8 Ecology) and tasked the Office to promulgate standards designed to provide the best achievable
9 protection to prevent oil spills. The resulting regulations included, among other things, the
10 following requirements:
11

- 12 • Covered vessels were required to certify that the crew had completed a
13 comprehensive training program approved by the state;
- 14 • The vessel’s master was required to be trained in shipboard management;
- 15 • Licensed deck officers were required to be trained in bridge resource
16 management, automated radar plotting aids, shiphandling, oil spill prevention and
17 response, and shipboard firefighting;
- 18 • English language proficiency requirements were imposed on ships’ crews; and
- 19 • Navigation watch was required to include at least two licensed deck officers.

20 *Id.* at 112-13. In short, Washington’s legislation focused in significant part on mandating
21 “staffing levels, training procedures, and operational methods” that to this day are the lynchpin
22 of Washington’s best achievable protection standard. WAC 173-180-025(1). Not coincidentally,
23 the regulations’ training program and core competency requirements closely resemble
24 qualifications that every Puget Sound Pilot must satisfy before becoming eligible to receive his
25 or her state license.
26

1 The International Association of Independent Tanker Owners (Intertanko), a trade
2 association whose membership at that time represented approximately 80% of the world's
3 independently owned tanker fleet and carried an estimated 60% of the oil imported into the
4 United States, challenged the regulations. *Locke*, 529 U.S. at 97. Intertanko argued that federal
5 navigation and oil spill protection laws preempted Washington's stricter requirements. *Id.* at 104.
6 Despite expressing a clear appreciation for Puget Sound's vital ecology (Justice Kennedy aptly
7 describes Puget Sound as "sustain[ing] fisheries and plant and animal life of immense value to
8 the Nation and to the world." *Id.* at 95.), the Court struck down key provisions of Washington's
9 regulation of tank vessels' personnel and operation, holding that key requirements that the State
10 deemed necessary to provide the best achievable protection of Washington's environment and
11 natural resources were preempted by federal law.
12
13

14 **Q: Does Washington law require application of the best achievable protection standard**
15 **to pilotage regulation?**

16 A: In my opinion, the answer is clearly yes. The Pilotage Act's legislative declaration of
17 policy and intent expressly states that "it is the policy of the state of Washington . . . to protect
18 the marine environment of the state of Washington through the sound application of compulsory
19 pilotage." RCW 88.16.005. Consistent with that policy mandate, Puget Sound Pilots' mission is
20 to "protect the marine environment by maintaining efficient and competent pilotage service on
21 our State's inland waters within the Puget Sound Pilotage District." *Our Mission*, Puget Sound
22 Pilots, <https://www.pspilots.org/our-mission/>.
23

24 As I explain above, the State of Washington has long understood that human error is a
25 leading cause of oil spills, and that the practice of safe navigation is a critical bulwark against
26

1 ecological catastrophe. Puget Sound Pilots direct the navigation of virtually 100% of ships
2 carrying oil cargo within the pilotage district and are directly responsible to ensure the safe
3 transport of enormous volumes of oil each year across the state's most ecologically sensitive
4 waterways. It is beyond question that Puget Sound Pilots are an indispensable (perhaps even the
5 single most important) component of the extraordinarily robust and effective regulatory system
6 that underwrites Washington's zero spill policy.

7 The best achievable protection standard for spill prevention is grounded in the state's
8 fiduciary duty to protect Washington's environment and natural resources that it holds in trust for
9 the public. Pilots—whose services the state compels shipowners to purchase explicitly for the
10 purpose of environmental protection—bear an enormous weight of responsibility for oil spill
11 prevention. It would be bizarre (and a blatant abdication of the Legislature's clear statement of
12 the state's fiduciary duty) if the best achievable protection standard did not govern/guide the
13 regulation of pilotage in Washington.
14

15
16 **Q: Does Washington's Pilotage Act directly reference the best achievable protection**
17 **standard?**

18
19 **A:** Yes. Washington's Pilotage Act is contained at RCW 88.16.005 *et seq.* The Act was
20 amended in 2019 to include Section 88.16.260 in connection with Washington's adoption of the
21 Reducing Threats to Southern Resident Killer Whales by Improving the Safety of Oil
22 Transportation Act. Among other things, the Act requires a tug escort for small oil tankers
23 between 5,000-40,000 deadweight tons transiting Rosario Strait. RCW 88.16.260(1)(a)(i), (1)(c).
24 The required tug escort provides an additional level of protection in case a vessel loses power or
25 maneuverability during transit.
26

1 Rosario Strait is an extraordinarily ecologically sensitive area that is very difficult to
2 navigate due to its narrow, heavily-trafficked shipping lanes, complex geography, and strong
3 currents. Vast quantities of oil pass through Rosario Strait each year on tank vessels operating
4 under both compulsory and voluntary pilotage. Some U.S.-flagged tank vessels choose to operate
5 under local pilotage as an added safety measure.

6 Responsibility for implementing the Act is shared by the Department of Ecology and the
7 Board of Pilotage Commissioners. These two agencies entered into an Interagency Agreement
8 (IAA No. C2000090) in furtherance of their collaboration to effectively implement the Act. That
9 Agreement allocates project-specific responsibilities among the agencies and provides a
10 framework for interagency communication and decision-making. A copy of IAA No. C2000090
11 is Exhibit CPC-16.
12

13 The Pilotage Act, as amended by RCW 88.16.260, requires the BPC, in collaboration
14 with the Department of Ecology, to “adopt rules regarding tug escorts to address the peculiarities
15 of Puget Sound” no later than December 31, 2025. RCW 88.16.260(1). These tug escort rules
16 must be “designed to achieve best achievable protection.” *Id.* § 88.16.260(3)(d). The term “best
17 achievable protection” as used in the Pilotage Act has the definition given in RCW 88.46.010.
18

19 The majority of loaded tank vessels that are subject to the Reducing Threats to Southern
20 Resident Killer Whales by Improving the Safety of Oil Transportation Act are controlled by
21 Puget Sound Pilots. The purpose of tug escort is to provide protection in the event the ship loses
22 maneuverability or the ability to operate under its own power. In this circumstance, it is Puget
23 Sound Pilots who will direct the assist tugs by issuing direct navigational orders to the tug
24 operators. Tugs provide power and maneuvering to a vessel in distress. But it is the pilot’s local
25 knowledge, experience, and expert judgment that ensure the tug assist is used effectively to
26

1 achieve a safe outcome. Put simply, fulfilling the Act’s directive to provide best achievable
2 protection through mandatory tug assist depends inextricably on maintaining an elite Puget
3 Sound Pilot corps.
4

5 **Q: How else is the best achievable protection standard incorporated in Washington’s**
6 **pilotage regulations?**

7 A: Fundamentally, Washington’s protection of Puget Sound’s natural resources and
8 environment is only as good as its state-licensed pilots. In a very concrete sense, best achievable
9 protection against oil spills simply cannot exist without providing the best achievable training
10 and composition of the states’ pilot corps. That fact is evident in the Pilotage Act’s sections that
11 prescribe pilots’ training and licensure requirements. Rather than restate those requirements here,
12 I encourage the Commission to review the testimony of PSP Vice President Captain Eric
13 Klapperich, which describes in detail the extraordinarily rigorous process to become a Puget
14 Sound Pilot that includes years of intensive training and an incredibly selective application
15 process that is designed to separate out the most elite mariners from a small national pool of
16 candidates.
17

18
19 Pilots’ ratemaking regulations likewise incorporate the best achievable protection mandate.
20 Specifically, RCW 81.116.020 instructs this Commission to ensure that “the tariffs provide rates
21 that are fair, just, reasonable, and sufficient for the provision of pilotage services.” (emphasis
22 added). Where pilots are a fundamental element of Washington’s oil spill prevention system,
23 rates that are “sufficient for the provision of pilotage services” can only mean rates that are
24 sufficient to support a pilotage system that provides the best achievable protection of
25 Washington’s marine environment.
26

1 Such a system must adequately fund staffing levels that are sufficient to minimize call
2 backs and protect pilot rest periods that are crucial to safe navigation. A system that is sufficient
3 for pilotage services that provide the best achievable protection also requires funding a
4 competitive compensation package that will attract and retain top candidates from an
5 extraordinarily small national pool. Puget Sound Pilots have adopted a nation-leading maternity
6 leave policy that is designed to attract a diverse and elite pilot corps. But to be effective, this
7 policy must be paired with a compensation package that is commensurate with what is offered by
8 pilot groups around the country.

9
10 To borrow words of wisdom from the Department of Ecology, “[i]t is far less expensive
11 to prevent an oil spill than it is to clean one up.” Nowhere is that more true than in the decision to
12 fund a pilotage system that is sufficient to provide the best achievable protection of Puget Sound.

13
14 **Q: What is the estimated cost of a significant oil spill in the waters of Puget Sound?**

15
16 A: According to the Department of Ecology’s website, based on 2006 estimates, a
17 significant oil spill could cost the State of Washington approximately \$10.8 billion.
18 <https://ecology.wa.gov/Spills-Cleanup/Spills/Oil-spill-prevention>. Adjusted for inflation, that is
19 about \$15.5 billion in today’s dollars. In addition, the Department estimates that a significant
20 spill could adversely affect about 165,000 jobs. Of course, it is impossible to characterize the
21 actual cost of such a catastrophe in purely economic terms, and there is no question that a
22 significant spill would irreparably harm Puget Sound’s unique and highly sensitive environment.

23
24 One need only look to the 1989 *Exxon Valdez* catastrophe in Alaska’s Prince William
25 Sound to understand the devastating long-term consequences if a significant spill were to occur
26 in the waters of Puget Sound. In 2009, Yale Environment 360, a publication of the Yale School

1 of the Environment, published an article commemorating the 20-year anniversary of the Exxon
2 Valdez spill titled Twenty Years Later, Impacts of the Exxon Valdez Linger. The article (a copy
3 of which is attached as Exhibit CPC-21 to my testimony) explains that contrary to the claims of
4 Exxon executives, 20 years after the spill Prince William Sound's environment was far from
5 recovered. Rather, the Exxon Valdez Oil Spill Trustee Council, a government-created monitor,
6 found that 17 of 27 monitored species had not recovered and that at a disappearance rate of less
7 than 4% per year, it would "take decades and possibly centuries [for the spilled oil] to disappear
8 entirely." Orcas and pacific herring – both of which are ecologically significant species with
9 sensitive populations located in Puget Sound – were among the unrecovered species most
10 affected by the spill.
11

12
13 **Q: Did oil transportation safety and spill prevention improve after the *Exxon Valdez***
14 **spill?**

15 A: Yes. There is no question that legislation enacted at both the federal and state level after
16 the *Exxon Valdez* disaster significantly improved oil transportation safety. Congress passed the
17 landmark Oil Spill Protection Act of 1990 (OPA 90) in direct response to the *Exxon Valdez* spill.
18 Among other key provisions, OPA 90 required a complete phase out of single-hulled oil tankers
19 plying U.S. waters by 2015, which standing alone has significantly reduced the risk of a major
20 spill emanating from a tanker casualty. Washington likewise strengthened its environmental
21 protection statutes in response to the *Exxon Valdez* catastrophe and adopted a "zero spill" policy
22 grounded in the best achievable protection standard that today is found in OSPRA, VOSPRA and
23 the Pilotage Act.
24
25
26

1 **Q: Has the improved regulatory system imposed by OPA 90 and Washington's**
2 **environmental protection statutes eliminated the risk of a significant oil spill on Puget**
3 **Sound?**

4 A: Of course not. There can be no doubt that legislative action significantly improved oil
5 transportation safety after the *Exxon Valdez* spill. Moreover, more recent legislation including
6 the Reducing Threats to Southern Resident Killer Whales by Improving the Safety of Oil
7 Transportation Act that was adopted by the legislature in 2019 continues to build on
8 Washington's nation-leading oil spill prevention policy. Nevertheless, it remains the case that
9 every year enormous quantities of oil (both cargo and bunker fuel) is transported across Puget
10 Sound on heavily trafficked waterways, often in foul and unpredictable maritime conditions. So
11 long as this remains the case, the risk of a significant spill will be ever present and cannot be
12 completely eliminated.
13

14
15 **Q: Is the risk of a significant oil spill limited to a casualty involving a tank ship or**
16 **barge carrying oil as cargo, which are the most strictly regulated vessel classes under OPA**
17 **90 and Washington law?**

18 A: Absolutely not. To appreciate the scope of protection that is necessary to meet
19 Washington's zero spill policy, it is critical to understand that the risk of a significant ship-based
20 oil spill is not limited to vessels carrying petroleum products as cargo. Large container ships,
21 which account for more pilotage jobs on Puget Sound than any other ship type present very
22 serious risks in the form of fuel stores as large as 4.5 million gallons. The *Cosco Busan* disaster
23 in San Francisco Bay that occurred almost 20 years after OPA 90 is a powerful example of this.
24 On November 7, 2007, the container ship *M/V Cosco Busan* allided with the Delta Tower of the
25
26

1 San Francisco–Oakland Bay Bridge in thick fog. The allision caused more than 53,000 gallons of
2 IFO-380 heavy fuel oil to spill into San Francisco Bay, fouling over 100 miles of coastline and
3 causing extensive environmental damage.

4 The *Cosco Busan* was not a tank vessel, and it was not carrying oil as cargo. Rather,
5 100% of the more than 53,000 gallons of spilled oil was bunker fuel carried aboard for
6 consumption by the ship itself. Incredibly, at approximately 902-feet in length overall, the *Cosco*
7 *Busan* is considered small by modern standards. Today, container ships of 1,200 feet or more call
8 regularly at the Ports of Tacoma and Seattle. These massive ships can hold millions of gallons of
9 bunker fuel. An example of this is CMA CGM Benjamin Franklin, which called Puget Sound for
10 the first time in 2016. At more than 1,300 feet length overall, this massive container ship is more
11 than 200 feet longer than a U.S. Navy aircraft carrier and can hold as much as 4.5 million gallons
12 of bunker fuel.

13
14 Even the comparatively smaller “Post Panamax” container ships can carry between 2.5
15 and 3.5 million gallons of fuel. There is no question that a casualty involving one of these
16 increasingly massive and difficult to maneuver cargo ships carries a serious risk of a significant
17 oil spill.

18
19
20 **Q: What is required to fully fund a pilotage system that is sufficient to ensure the best**
21 **achievable protection of Puget Sound?**

22 A. There are two key elements to funding a pilotage system that is sufficient to provide the
23 best achievable protection of Puget Sound. First, the tariff must fund a fully staffed pilot corps in
24 order to reduce PSP’s need to rely on callbacks and minimize the risk of fatigue. Second, the
25 tariff must fund a comprehensive compensation package that includes distributable net income
26

1 and benefits at levels that are sufficient for PSP to compete effectively in the recruitment of top
2 candidates from diverse backgrounds within a small national pool.

3
4 **Q: How does the cost of funding a best-in-class pilotage system compare with the cost of**
5 **a significant oil spill?**

6 A: As I said before, the true cost of a significant oil spill is impossible to measure in purely
7 economic terms. The devastating impact of such an event on Puget Sound's environment would
8 be extremely long-lasting and (as was the case in Prince William Sound) some species might
9 never recover. That said, the economic cost of a significant oil spill standing alone dwarfs the
10 cost to fund a sufficient pilotage system by orders of magnitude. Assuming the Department of
11 Ecology's inflation-adjusted estimate of about \$15.5 billion, the cost of just one significant oil
12 spill is enough to fund PSP's total requested tariff for more than 300 years.

13
14
15
16 **Q: How does the cost of PSP's proposed tariff compare to the revenue earned by the**
17 **shipping industry from cargo traffic at Puget Sound's major commercial ports?**

18 A: I have reviewed the economic testimony prepared by Ken Eriksen, which concludes that
19 the cost of pilotage is insignificant and has no effect whatsoever on the competitiveness of a
20 particular port.

21
22 **Q: Apart from the massive difference in the amount of money at issue, are there any**
23 **other important differences between the cost of a significant oil spill and the cost of funding**
24 **a pilotage system that meets the best achievable protection standard?**
25
26

1 A: Yes. There is a critical difference in terms of who bears the cost. The pilotage system is
2 funded entirely by ratepayers, approximately 80% of which are foreign flagged vessels that
3 typically are beneficially owned and operated by large, well-heeled carriers. (I refer here to
4 beneficial ownership because, as I discuss in detail later in my testimony, these ships' registered
5 owners are often shell companies that hold no assets apart from the vessel itself and are created
6 specifically to evade liability and deflect the cost of a major casualty away from the shipping
7 company and on to society at large). The pilotage system, in other words, provides an enormous
8 benefit to the citizens of the State of Washington at virtually no cost to them. The cost of a
9 significant oil spill, on the other hand, could (and very likely would) be borne predominantly by
10 Washington's taxpayers.
11

12
13 **Q: You state that the cost of a significant oil spill would be borne by Washington's**
14 **taxpayers. How can that be so, where OPA 90 and Washington law require evidence of**
15 **financial responsibility and impose strict liability for an oil spill on the responsible party or**
16 **parties?**

17 A: It is true that OPA 90 and Washington law (specifically, RCW 90.56.370) impose strict
18 liability on responsible parties in the event of an oil spill, subject to limited exceptions. It is also
19 true that these laws require evidence of financial responsibility to operate in U.S. and
20 Washington waters. *See, e.g.,* RCW 88.40.040. However, these laws, while critically important,
21 are not sufficient to insulate Washington and its citizens from the brunt of costs caused by a
22 significant oil spill.
23

24 That is true for two reasons. First, the irreparable harm that Washington and its citizens
25 would suffer if a significant oil spill were to occur in Puget Sound cannot be reduced to a simple
26

1 dollar figure. In that regard, I am reminded of a famous antitrust case authored by the revered
2 Judge Henry Friendly of the United States Court of Appeals for the Second Circuit. That case,
3 *Semmes Motors, Inc. v. Ford Motor Co.*, 429 F.2d 1197 (2d Cir. 1970), involved a request by a
4 family run automobile dealer to enjoin Ford Motor Company from terminating its dealership.
5 Ford argued that an injunction was unnecessary because Semmes' alleged damages could be
6 measured based on its past profits. In rejecting Ford's argument, Judge Friendly explained his
7 reasoning as follows:

8 Of course, Semmes' past profits would afford a basis for calculating
9 damages for wrongful termination, and no one doubts Ford's ability to
10 respond. But the right to continue a business in which William Semmes
11 had engaged for twenty years and into which his son had recently entered
12 is not measurable entirely in monetary terms; the Semmes want to sell
13 automobiles, not to live on the income from a damages award.

14 *Id.* at 1205.

15 Judge Friendly's analysis no doubt applies to many if not most of the approximately
16 165,000 jobs that the Department of Ecology estimates would be affected by a significant oil
17 spill. Washington – and the Puget Sound region in particular – has a proud history and tradition
18 of pursuing maritime and related shoreside trades. A significant oil spill would upend the lives of
19 commercial fishermen, longshoremen, hospitality workers, and countless others whose careers
20 are inextricably intertwined with an ecologically and commercially thriving Puget Sound. In the
21 event of such a life-altering disaster, these individuals would not be made whole by a damages
22 check.

23 The second reason that Washington taxpayers would likely bear the brunt of costs caused
24 by a significant oil spill is that (unlike Ford Motor Company in the *Semmes* case) there is
25 significant reason to doubt that a liable vessel owner or operator would have the ability to pay for
26 the economic damage it caused. While some primarily domestic ship owners and operators (such

1 as Exxon) have deep (and accessible) pockets, the large majority of merchant ships transiting
2 Puget Sound are foreign flagged and unlikely to have significant recoverable assets beyond the
3 minimum financial responsibility amount required by statute. That financial responsibility
4 requirement would likely pale next to the cost of a significant spill. For example, under
5 Washington law the financial responsibility requirement for the largest container ships that can
6 carry millions of gallons of oil is just \$300 million, less than 2% of Ecology's inflation-adjusted
7 \$15.5 billion average estimated cost of a significant spill.

8
9 **Q: Does Washington law limit or place a “cap” on a responsible party’s liability for an**
10 **oil spill?**

11
12 A. No. In practice, however, the Legislature’s decision not to limit liability is irrelevant if
13 the shipowner or operator lack collectible assets beyond the minimum financial responsibility
14 requirement. And the owners and operators of foreign flagged ships routinely make certain that
15 is the case through strategies that include the use of single vessel entities that these shipping
16 interests deploy deliberately to shift environmental and other tort liability away from themselves
17 and onto the public.

18
19
20 **D. The Unscrupulous Practices of Foreign Flag Shipowners Pose Significant**
21 **Risk to Puget Sound.**

22 **Q: Is there evidence to support your assertion that foreign flag shipping interests use**
23 **deliberate strategies to shift the environmental liability burden of their operations onto the**
24 **public?**

25 A: Yes. Strategic liability evasion by shipping interests is widely known in our industry and
26 is well documented. Two articles that thoroughly discuss this issue are Exhibits CPC-17 and

1 CPC-18 to my testimony. The first article, Evading Corporate Responsibilities: Evidence from
2 the Shipping Industry, is a research paper authored by the French economist Dr. Guillaume
3 Vuillemeay and published in 2021 by the Center for Economic Policy and Research. The second
4 article, How the Shipping Industry Sails through Legal Loopholes, is a journalistic piece
5 published in May 2022 in Hakai Magazine, which is a publication of the Hakai Institute, a
6 scientific research institute located in British Columbia.

7
8 **Q: Could you please describe the economic scale of the international shipping industry?**

9 A: According to UNCTAD 2019, the shipping industry handles between 80-90% of the
10 global trade in goods. This is accomplished through an incredibly complex network of more than
11 30,000 large ships of different types (*e.g.*, container, bulk carrier, tanker) that constantly ply the
12 oceans' well-established trade routes delivering fuel, raw materials, and finished goods to
13 commercial ports around the world. The Hakai Magazine article that is Exhibit CPC-18 to my
14 testimony is also available online at [https://hakaimagazine.com/features/how-the-shipping-](https://hakaimagazine.com/features/how-the-shipping-industry-sails-through-legal-loopholes/)
15 [industry-sails-through-legal-loopholes/](https://hakaimagazine.com/features/how-the-shipping-industry-sails-through-legal-loopholes/). The online article contains an animated interactive map
16 produced from hundreds of millions of individually recorded ship positions that includes audio
17 narration and provides an excellent visual description of the operational scale of international
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shipping. A screenshot of the opening frame of interactive map is reproduced below:



Q: Is the international shipping industry a competitively structured market?

A: In my opinion, no. The shipping industry has, for a long time, held limited immunity from antitrust laws under the Shipping Act. Historically, the reasoning behind this exemption was that limited cooperation among competing carriers would improve efficiencies in international shipping. The consolidation of the industry in recent years into alliances among the largest carriers, however, has raised serious concerns. During a 2017 hearing of the Coast Guard and Maritime Transportation Subcommittee of the House Transportation and Infrastructure Committee, Oregon's long-serving Congressman Peter DeFazio, expressed his concerns as follows:

There is no one in the industry who thinks these people aren't getting together in the room and colluding over pricing and who is going to control what harbors and what marine facilities, what they are going to do. It's Pollyannish to think these alliances are just going to just help make the industry more

1 efficient. Twenty years ago, that might have been true. It's not true today and
2 they are foreign controlled.

3 **Q: Please explain what “alliances” are in the international shipping industry?**

4 A: Alliances are essentially cooperation and asset sharing agreements among major shipping
5 companies. Historically, smaller carriers utilized alliances to achieve to economic efficiencies by
6 improving geographic coverage and shipping options. Today, however, just three alliances—2M,
7 Ocean Alliance, and THE Alliance—comprise nearly all the world's major carriers and account
8 for about 80% of global container traffic.
9

10 The foreign shipping industry and its various lobbying arms tend to defend this massive
11 consolidation of the market by claiming that it improves service and reduces shipping costs. The
12 reality, however, is that shipping costs have skyrocketed to unprecedented levels while in 2021
13 the major carriers saw record profits.

14 Exhibit CPC-19 to my testimony is a 2018 report prepared by the International
15 Transportation Forum, which is a politically autonomous intergovernmental organization
16 comprised of 59 member countries. The report, titled “The Impact of Alliances in Container
17 Shipping”, thoroughly analyses the rise and effect of the three major shipping alliances. The
18 following quote from the ITF report's executive summary succinctly describes the problems
19 raised by the industry's consolidation:
20

21
22 Within ports, the buying power of the alliance carriers can create destructive
23 competition between terminal operators and between other port service
24 providers such as towage companies. This can lower the rates of return on
25 investment for the port industry, results in the decline of smaller container
26 ports and the disappearance of smaller independent terminal operators, as well
as towage companies. A particular concern is that alliance carriers frequently
exert strong pressure for publicly funded infrastructure upgrades to be
undertaken to support the use of mega-ships, while these expenditures often

1 prove to be uneconomic, either due to shifting demand for port services or the
2 monopsony power exercised by the alliances.

3
4 CPC-19 at 6.

5 **Q: Does the ITF report reach any conclusions regarding whether alliances do in fact
6 produce more efficient transport systems?**

7 A: Yes. The report reached the following conclusion on this topic:

8 The new constellation of alliances since April 2017 – along with the
9 deployment of mega-ships to which alliances are directly linked – has
10 contributed to a decrease in service frequencies, less direct port connections,
11 declining schedule reliability and longer wait times.

12 ...

13 The impacts of alliances on the containerized transport system taken as a
14 whole seem to be predominantly negative. They contribute to concentration of
15 port networks and related underutilization of public infrastructures, in
16 combination with other factors some of which are directly related to alliances,
17 such as mega-ships and the behavior of port authorities.

18 CPC-19 at 19.

19 **Q: The ITF report you reference above was published in 2018, shortly after the rise of
20 the three now-dominant alliances. In the approximately four years since the report was
21 published, has containerized shipping become less expensive and more efficient?**

22 A: No, quite the opposite. During the Covid-19 pandemic, carriers raised prices by as much
23 as 1,000% and enjoyed record profits even as shipping customers and consumers experienced
24 unprecedented delays and failing service. According to a summary of research prepared in
25 support of the recently passed bipartisan Ocean Shipping Reform Act that is attached as Exhibit
26 CPC-20 to my testimony, major carrier Hapag-Lloyd saw profits increase by 906% to \$10.75

1 billion in 2021. Evergreen Marine saw a similar increase of nearly 881% last year, prompting its
2 president to state “I sleep very well every day. And I even smile in my dreams.”

3 President Biden was less enthusiastic in his most recent State of the Union Address:

4 When corporations don’t have to compete, their profits go up, your prices go
5 up, and small businesses and family farmers and ranchers go under. We see it
6 happening with ocean carriers moving goods in and out of America. During the
7 pandemic, these foreign-owned companies raised prices by as much as 1,000%
8 and made record profits. Tonight, I’m announcing a crackdown on these
9 companies overcharging American businesses and consumers.

10 In fact, the exorbitant shipping costs imposed by the cartel-like alliances that have come to
11 dominate the shipping industry are widely considered a significant driver of the current inflation
12 problem in the U.S.

13 **Q: What has the U.S. government done to, as President Biden put it, “crackdown” on
14 abusive practices by the major global carriers?**

15 **A:** This year, Congress passed the Ocean Shipping Reform Act of 2022. According to the
16 summary given at Congress.gov, the Act:

17 [R]equires the FMC [Federal Maritime Commission] to (1) investigate
18 complaints about detention and demurrage charges (i.e., late fees) charged by
19 common ocean carriers, (2) determine whether those charges are reasonable,
20 and (3) order refunds for unreasonable charges. It also prohibits common
21 ocean carriers, marine terminal operators, or ocean transportation
22 intermediaries from unreasonably refusing cargo space when available or
23 resorting to other unfair or unjustly discriminatory methods.

24 The Act unanimously passed the Senate and was signed into law by President Biden signed on
25 June 16, 2022. A recording of President Biden’s signing ceremony speech is available at
26 <https://www.c-span.org/video/?521114-1/president-biden-signs-ocean-shipping-reform-act-2022>.
Washington Senator Maria Cantwell, who chairs the Senate Commerce Committee and co-
sponsored the Act, pointedly called out in her floor speech the need for aggressive action against
the “exorbitant fees that are being charged by these international shipping companies.” A

transcript of Senator Cantwell’s floor speech is available at

1 [https://www.cantwell.senate.gov/imo/media/doc/03312022%20Ocean%20Shipping%20Final%20](https://www.cantwell.senate.gov/imo/media/doc/03312022%20Ocean%20Shipping%20Final%20Passage%20Floor%20Speech%20Transcript1.pdf)
2 [Passage%20Floor%20Speech%20Transcript1.pdf](https://www.cantwell.senate.gov/imo/media/doc/03312022%20Ocean%20Shipping%20Final%20Passage%20Floor%20Speech%20Transcript1.pdf).
3

4 **Q: What, in your opinion, are the key takeaways from the concentration of the**
5 **shipping industry and the predatory business practices highlighted by the President and**
6 **Congress?**

7
8 A: The critical takeaway from my perspective is not necessarily that the shipping industry is
9 highly profitable—there is, of course, nothing inherently wrong with businesses increasing
10 profitability—but that there is very strong evidence that the nine extraordinarily large foreign
11 carrier companies that make up the three dominant shipping alliances and control about 80% of
12 global container cargo are achieving that result by exploiting their market power and engaging in
13 abusive practices that harm the public. In my opinion, the evidence to support a pattern and
14 practice by the international shipping industry of maximizing profitability by externalizing the
15 risks and costs associated with their business is highly compelling. This includes not just the
16 issues addressed by the Ocean Shipping Reform Act, but also the industry’s evasion of corporate
17 responsibility through the tactics identified by Dr. Vuillemeys that include flags of convenience,
18 last-voyage flags, and single vessel entities.
19
20

21 **Q: Can you give an example of how what you describe as a pattern and practice by**
22 **foreign shipping companies shift the risk and cost of doing business onto the public affects**
23 **the State of Washington and its citizens?**
24

25 A. Absolutely. Consider the rapidly increasing size of containerships calling Puget Sound.
26 The ITF report attached to my testimony documents extensively the relationship between this

1 trend and the alliance-driven concentration of the foreign shipping industry. As Captain
2 Klapperich explains in his testimony, the increasing prevalence of massive container ships has
3 made pilots' job of safely navigating these ships in Puget Sound's constricted waterways much
4 more difficult and presents a major threat to Puget Sound's ecology and natural resources. In the
5 event of a catastrophic oil spill, the cost burden of this activity would fall largely to the public.

6 Carriers profit immensely through the operation of the large container ships that call
7 continuously at the Ports of Tacoma and Seattle. Yet these same companies, through their
8 representatives at the Pacific Merchant Shipping Association, staunchly oppose funding a
9 pilotage system at a level that is sufficient to compete nationally for top candidates and provide
10 the best achievable protection that Washington's environmental protection laws require. I find
11 that highly concerning and, unfortunately, consistent with the other evidence of exploitative
12 practices by the foreign shipping industry.

14 **Q: Could you please briefly describe the abstract and conclusions of Dr. Vuillemeys's**
15 **research paper that you referenced above and which we will refer to as "Evading**
16 **Corporate Responsibility"?**

17 A. In Evading Corporate Responsibility, Dr. Vuillemeys shows that during the past
18 approximately four decades, the global shipping industry has increasingly deployed a suite of
19 practices developed to systematically evade corporate responsibilities, which the article defines
20 as "compliance with regulatory standards and potential tort liabilities." The principal
21 mechanisms of this widespread evasion scheme are threefold and include the dissociation of
22 legal and beneficial ownership of ocean-going vessels and the related fragmentation of assets
23 through single vessel entities; the use of open registries that are commonly referred to as "flags
24 of convenience;" and the use of "last-voyage flags" to evade the environmental and social
25
26

responsibilities associated with responsible ship breaking at the end of a vessel’s useful life. By
1 applying a series of microeconomic tests to a robust data set that includes (but is not limited to)
2 “detailed data on the ownership and operations history of all large merchant vessels that ended
3 life over the 2000-2019 period,” Dr. Vuillemey concludes unequivocally that corporate
4 responsibility evasion is a “dominant motive” behind the international shipping industry’s use of
5 these practices.
6

7
8 **Q: Please describe what single vessel entities are and how the international shipping**
9 **industry uses them to evade corporate responsibility including tort liabilities such as**
10 **environmental damage caused by an oil spill?**
11

12 A: Generally speaking, single vessel entities are a species of corporate subsidiary used to
13 insulate a ship’s beneficial owner from tort liabilities created by the ship. Dr. Vuillemey
14 describes the basic moral hazard as follows:

15 Together, the use of subsidiaries and the possibility to externalize tort liabilities
16 open the possibility of massive corporate irresponsibility: socially costly activities
17 can be located in small subsidiaries, possibly in jurisdictions with low regulation.
18 Corporate irresponsibility is then organized by paying out any income to parent
19 companies and liquidating subsidiaries in case of large liabilities.

20 CPC-17 at 2-3.

21 The modern international shipping industry is a posterchild for this practice, whereby
22 beneficial shipowners create a multiplicity of brass-plate subsidiary companies whose only asset
23 is the ship itself. As Dr. Vuillemey explains:

24 These [shipping] firms have increasingly dissociated legal and ultimate ownership,
25 using parent-subsidiary structures, while minimizing the amount of assets in each
26 subsidiary. Beyond global trends, microeconomic tests confirm that liability evasion
is a dominant force behind these facts.

Id. at 11.

1 Dr. Vuillemeey surveyed nearly 30,000 ships of 10,000 gross tons or more that were
2 commercially active as of September 2020 and found that nearly 90% of these ships' registered
3 owners were single vessel entities – a shockingly high figure that represents a significant
4 increase from the 1990's. Dr. Vuillemeey's survey further showed that at least half of the shipping
5 groups that are these ships' beneficial owners controlled as many subsidiaries as they did ships.
6 Tables 2 and 3 of Evading Corporate Responsibilities detail, respectively, the shipping industry's
7 increased use of single vessel entities over time and the current (as of September 2020) use of
8 this type of subsidiary among beneficial owners.

9
10 Significantly, Dr. Vuillemeey found that the use of single vessel entities is more prevalent
11 among ships that pose the greatest liability risk, such as ships that are larger, older, single-hulled,
12 or in a state of disrepair that resulted in a port detention. Further, oil tankers are comparatively
13 more likely to be held in single vessel entities. From these trends, Dr. Vuillemeey concludes that
14 “liability evasion is a relevant force behind long-term trends in corporate structures.”

15
16 Lastly, Evading Corporate Responsibilities specifically discusses the implications of
17 these liability-evading corporate structures for damages arising from a significant oil spill. As
18 explained in the article, shipowners' insurance coverage typically corresponds to limits on ships'
19 liability that are imposed by law. As a result, Dr. Vuillemeey concludes, “in case of major oil
20 spills, the total amount of damages is most often not compensated.”

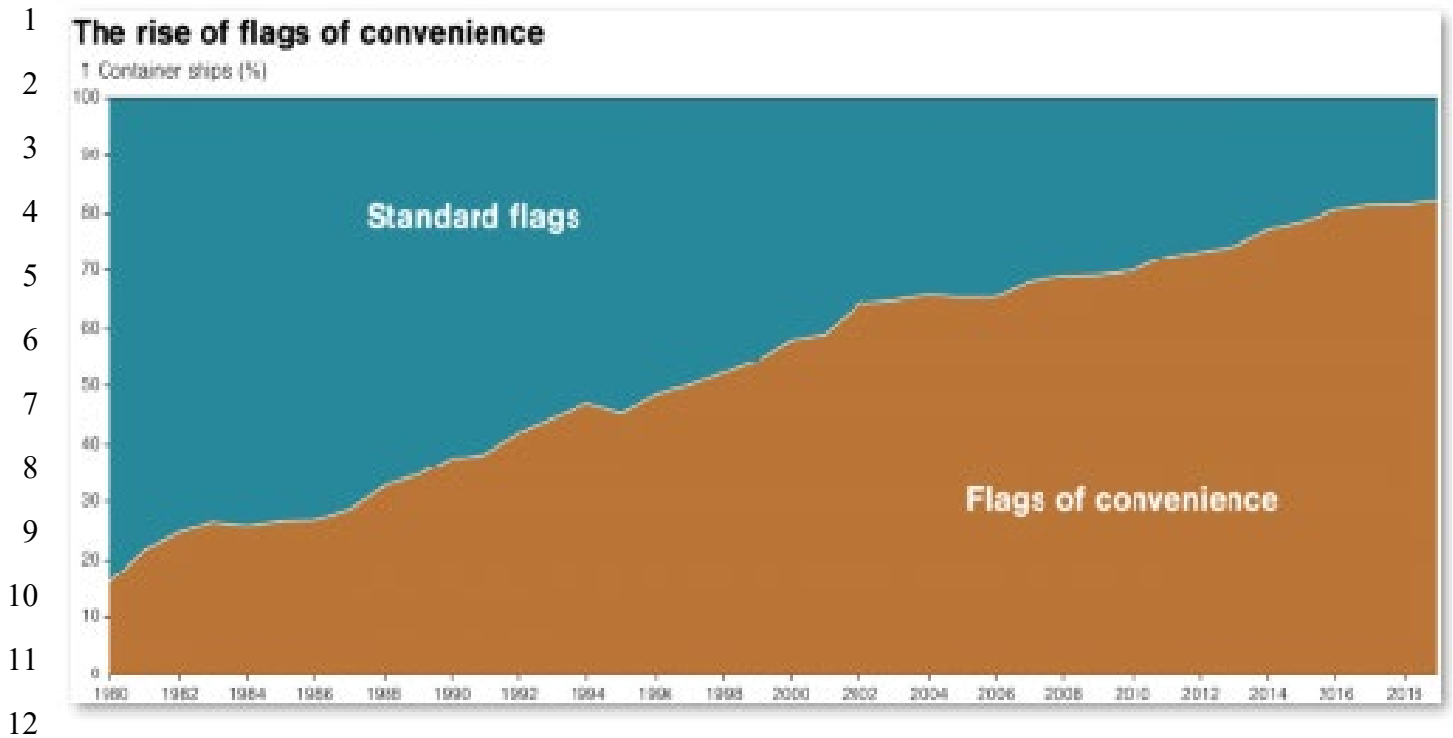
21
22 **Q: What are flags of convenience and how are they used by the shipping industry to**
23 **evade regulation and limit liability?**
24

25 A: To understand the term flag of convenience, one first needs to understand the concept of
26 a “flag state.” International maritime law deems a ship to be part of the territory of the state

1 whose flag it flies and, therefore, subject to the jurisdiction and laws of that state. International
2 law further requires that there be a “genuine link” (for example, the shipowner’s domicile)
3 between a ship and her flag state. The term “flag of convenience” refers generally to a state that
4 maintains an open ship registry that allows foreign ships to fly its flag while essentially ignoring
5 the genuine link requirement. Commonly used flags of convenience (e.g. Liberia, Panama, and
6 the Marshall Islands) are typically chosen by shipowners for variety of reasons that include
7 concealment of a vessel’s beneficial ownership and evading higher taxes and stricter safety
8 regulations in the owner’s home state.

9 Flags of convenience have been severely criticized for facilitating a wide range of serious
10 problems including drug smuggling, illegal fishing, and horrific abuses of maritime workers.
11 Unsurprisingly, vessels flying flags of convenience have been involved in several major oil
12 spills, including the infamous *Deepwater Horizon*, which was flagged by the Marshall Islands
13 when it dumped approximately 134 million gallons of oil into the Gulf of Mexico in what is
14 widely believed to be the largest accidental oil spill in history. (The largest spill by volume
15 occurred during the 1991 Persian Gulf War, when Iraqi forces deliberately released hundred of
16 millions of gallons of oil into the Persian Gulf).

17 In recent years, the prevalence of flags of convenience has risen dramatically. Though
18 present across different classes of ship, this effect is most pronounced among container ships.
19 Between 1980 and 2019 the percentage of container ships flying flags of convenience rose from
20 less than 20% to more than 80%. A graph excerpted from Exhibit CPC-18 to my testimony
21 showing this trend is reproduced below:
22
23
24
25
26



13 Consistent with this trend, many of the container ships that call Puget Sound today fly flags of

14 convenience. Some of these ships violate pilot transfer safety requirements, putting Puget Sound

15 Pilots' lives needlessly at risk.

16

17

18 **Q: Do ships maintain the same flag throughout their useful life?**

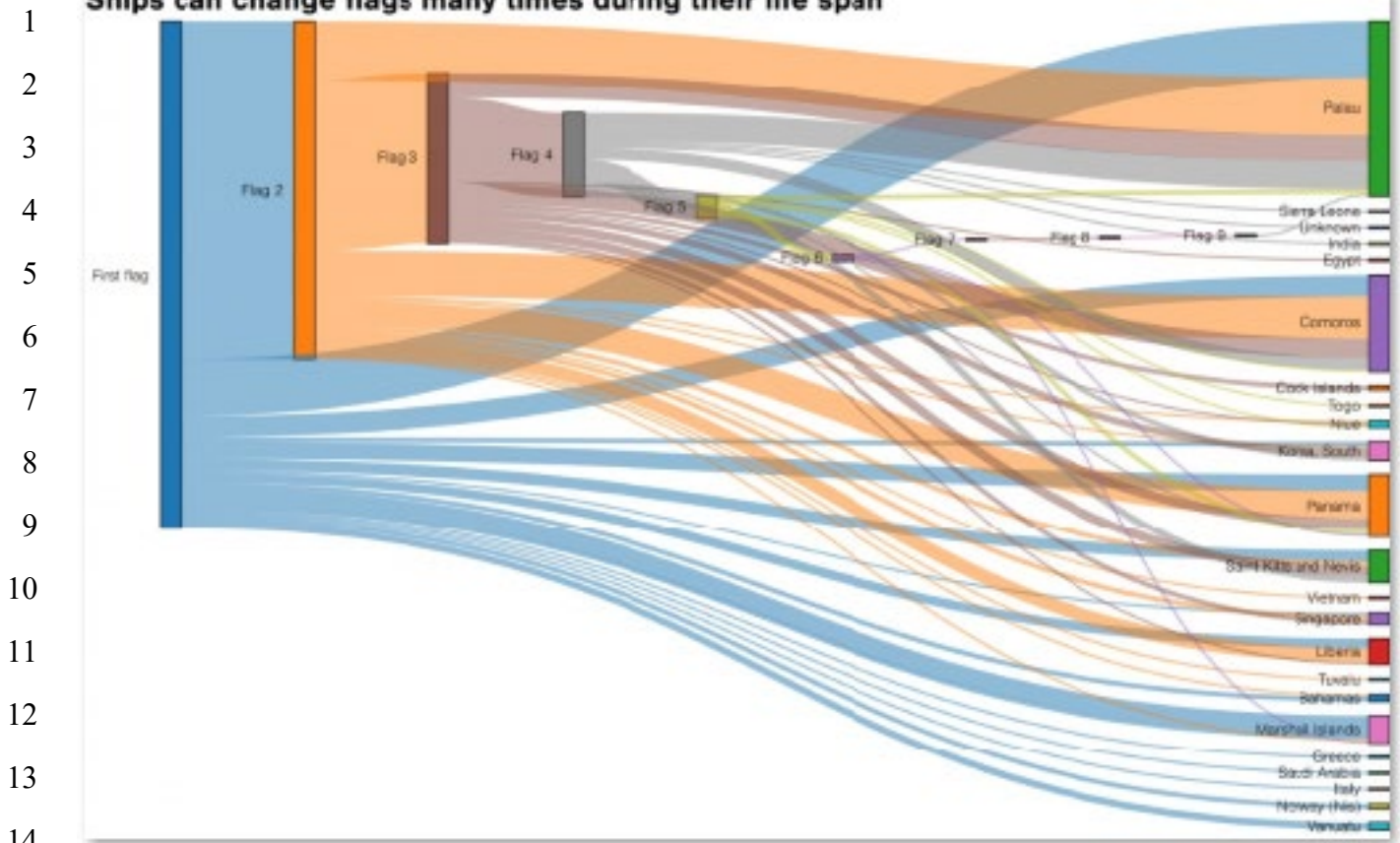
19 A: Not necessarily, no. In fact, ships often “reflag” several times during their useful life. A

20 diagram excerpted from Exhibit CPC-18 to my testimony that shows changes in flags flown by

21 container ships that were decommissioned in 2018 and 2019 is reproduced below:

22

Ships can change flags many times during their life span



As this diagram illustrates, more than one third of these ships changed flags at least three times.

Disturbingly, Dr. Vuillemeys' research demonstrates that shipowners tend to adopt lower quality flags (*i.e.*, register with flag states that impose lower standards for worker, environmental and other protections) as ships age and present greater liability risks. This is likely due to the fact that certain flags of convenience are recognized and targeted more frequently for inspection by Port Control States upon their arrival. As the article explains:

For young ships, which are unlikely to suffer from major defects, satisfying higher technical standards is not very difficult, while the time lost during port state control inspections is arguably more costly.

CPC-17 at 26.

1 On the other hand, as ships age and become more dangerous, the economic calculus changes:

2 As ship quality drops *with* age, maintenance costs can become too large relative to
3 the the cost of time lost during inspections. Shipowners thus find it optimal to re-
4 flag in jurisdictions with lower standards.

5 *Id.*

6 Thus, the comprehensive data set used in Evading Corporate Responsibility demonstrates
7 that:

8 [A]t the end of their life (i.e., for the last two flags), shipping companies seek flag
9 states that have ratified fewer conventions related to the global shipping context, to
10 the protection of the environment and to the protection of workers.

11 *Id.*

12 The devolution in shipping companies' willingness to accept accountability for their operations
13 that occurs as a ship ages is perhaps best exemplified by the highly problematic rise in the use of
14 "last-voyage flags" to evade laws that regulate ship breaking practices.

15
16 **Q: What are "last-voyage flags," and why is their use so problematic?**

17 A: To understand the use of last-voyage flags, one must first understand the end-of-life
18 concerns that aging merchant ships present. These are massive ships that in many cases have
19 spent years or decades carrying hazardous cargo. Proper disposal of these ships is challenging
20 and costly, which is cause enough for a significant segment of international shipping companies
21 to cut corners.

22
23 In a surprising number of cases, aging ships are simply abandoned with cargo and unpaid
24 crew still aboard. This was true in the case of the *MV Rhosus*, a Moldovan flagged cargo ship
25 that sailed into the Port of Beirut in 2014 carrying 2,750 ton of ammonium nitrate. The ship was
26 abandoned by its owner after being declared unseaworthy and ultimately sank in the port's

1 waters in 2018. The ship's hazardous cargo, meanwhile, was removed from the ship and
2 relocated to a shoreside port facility. The incident drew little international attention until 2020,
3 when the abandoned cargo caused a massive explosion that killed 180 people, wounded
4 approximately 6,000, and leveled a large section of the City of Beirut.

5 Far more common than abandonment, however, is the environmentally and ethically
6 fraught practice of "beaching" retired ships. Beaching involves driving the ship at full ahead onto
7 shore at a beaching yard, where it is dissembled by workers, often in horrible conditions with
8 little or no labor or environmental protections in place. This practice occurs almost exclusively in
9 India, Pakistan, and Bangladesh (China recently banned imports of aging ships due to
10 environmental concerns) and has been widely criticized by governments and prominent NGOs.

11 A photograph of a beaching yard excerpted from Exhibit CPC-18 of my testimony is reproduced
12 below:
13



25 Shipping companies that need to dispose of end-of-life ships face a dilemma: they do not
26 want to draw the ire of regulators (e.g., the European Union, which recently imposed

1 environmental standards for approved shipbreaking facilities) or reputational injury from bad
2 press associated with unsafe practices, but they also do not want to pay the high cost of proper
3 disposal. The increasingly popular solution to this dilemma is to reregister the ship with a last-
4 voyage flag within weeks or months of its destruction and then sell the ship to a third-party cash
5 buyer whose only function is to sail the ship to the beaching yard.

6 Dr. Vuillemeey succinctly summarizes this insidious gambit:

7 Ships change owners, names and flags specifically for their last-voyage to beaching
8 yards. On the one hand, some flags of convenience have specialized in offering
9 light flag registration standards for last voyages. On the other hand, some
10 companies (so-called “cash buyers”) specialize in buying end-of-life ships from
11 shipping companies. Beaching it thus outsourced from shipping companies facing
12 public scrutiny to smaller limited liability companies that operate out-of-sight.
13 Shipping companies dealing with these cash buyers can then claim they did not
14 know ships would be beached. The market for outsourcing ships to cash buyers
15 transforms a waste that would be a cost to its owner (due to high costs of clean
16 recycling) into a source of profit (value of the raw materials), while externalizing
17 environmental damages.

18 CPC-17 at 29.

19 According to the data relied on in *Evading Corporate Responsibilities*, the use of last voyage
20 flags rose from being virtually non-existent less than 20 years ago to being the dominant practice
21 today. Whereas less than five percent of ships from the data set broken between 2000 and 2005
22 adopted a last voyage flag, nearly two thirds of ships broken in 2018 deployed the practice.

23 **Q: You have described several ways in which shipping companies evade corporate**
24 **responsibility and externalize liability including environmental damage. What is the**
25 **practical takeaway of these highly problematic industry practices with respect to the**
26 **protection of Puget Sound and, specifically, the need for an appropriately funded pilotage**
system?

1 A: It is important to be clear that not every shipping company or vessel engages in the
2 practices I have discussed above. Nevertheless, it is clear that a very significant percentage of the
3 international shipping industry can be fairly characterized as fundamentally unscrupulous and
4 exhibiting a serious disregard for human safety and environmental protection. It is critically
5 important to be clear eyed about the implications of that unfortunate reality and to understand
6 that these shipping companies cannot and should not be relied on to prioritize safe navigation on
7 Puget Sound, particularly when the state's fiduciary duty to protect Washington's natural
8 resources and ecology is in conflict with the ship's profit motive. While OPA 90 and Washington
9 law impose a wide range of safety requirements such as the maintenance of oil spill prevention
10 plans, the bottom line is that many shipping companies will cut corners to save money whenever
11 and however they can, including by restructuring corporate assets to shift the cost of damages in
12 a major casualty to the public.
13

14 The compulsory pilotage system and every individual Puget Sound Pilot stands as a
15 bulwark that protects Puget Sound – 24 hours a day, 365 days a year – against the risks that the
16 shipping industry creates and too often strategically shifts to the public. Unlike a ship's master
17 and bridge team who answer to the shipowner and are subject to commercial influence, pilots'
18 sole mission is safety, and they answer directly to the citizens of the State of Washington acting
19 through the Pilotage Board of Commissioners which prescribes their training program and has
20 the power to grant or revoke their pilots license.
21

22
23 **Q: Is it fair to say that it is the responsibility of shippers to mitigate the risk of tort**
24 **damages that they would be responsible for but likely unable to pay in the event of a**
25
26

1 **significant oil spill by funding a pilotage system that provides the best achievable**
2 **protection of Puget Sound?**

3 A: Absolutely. There is no question that commercial shipowners can and should be required
4 to fully fund a pilotage system that meets the best achievable protection standard in every
5 respect. The fact is that the shipping industry's operations by their nature create extraordinary
6 risks to Washington's ecology and natural resources. To a very significant degree, the industry
7 (often strategically and deliberately) externalizes these risks and shifts them onto the public.
8 Under these circumstances, it is entirely fair, just, and reasonable, that shipping companies be
9 ordered to pay pilotage rates that are sufficient to fund a pilotage system that mitigates the risk of
10 a serious maritime casualty to the maximum extent possible.
11

12 **E. Jointly Proposed Reduction in Rates for Foreign Yachts.**

13 **Q: Please describe what PSP proposes in connection with the pilotage rates for foreign**
14 **yachts that are less than 2000 gross tons?**

15 A: In what we consider to have been in oversight in connection with Order 09, the pilotage
16 rates for foreign yachts nearly doubled under the new tariff authorized by that order, a rate
17 increase far higher than that experienced by other vessel types. In order to address this inequity
18 and consistent with the relatively low risk profile of these yachts compared to large oceangoing
19 cargo vessels, PSP is proposing in this proceeding to reduce foreign yacht pilotage rates in three
20 categories to 60% of the current rates in those categories. The three categories are the tonnage
21 charge where all yachts are currently billed for a \$1410 minimum charge, the shift charge where
22 yachts are billed for a \$1210 minimum charge and the hourly pilot service fee charge of \$244.50.
23 In the new tariff that we have submitted, these charges change to \$846, \$726 and \$146.70,
24 respectively.
25
26

1 **Q: Will this change have any material effect on the total pilotage fees generated by**
2 **PSP's proposed new tariff.**

3
4 A: No, the total pilotage fees generated from foreign yachts of less than 2000 gross tons is a
5 nearly infinitesimal component of pilotage fee revenue. In 2021, for example, there were 43
6 foreign yacht pilotage assignments that generated \$126,326 in total revenue. This amounts to just
7 0.00395% of total pilotage revenue in that year.

8
9 **Q: What do you mean when you describe foreign yachts of less than 2000 gross tons as**
10 **having a lower risk profile than commercial oceangoing cargo carriers?**

11
12
13 A: The much lower risk profile for this less than 2000 gross tons category of foreign yachts
14 is a function of three factors: much lower fuel stores on board; slower speeds; and ease of
15 navigation.

16 **CI. CONCLUSION.**

17
18 **Q: Does this conclude your testimony?**

19 A: Yes.
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22
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26

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